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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/565,194

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EXAMINER

CHASE, SHELLY A

ART UNIT

PAPER NUMBER

2112

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/565,194	<b>Applicant(s)</b> GOLITSCHKE EDLER VON ELBWART ET AL.	
	<b>Examiner</b> Shelly A. Chase	<b>Art Unit</b> 2112	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.  
4a) Of the above claim(s) 2,6,11,14,16,17 and 19-23 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 25-31 and 33 is/are allowed.
- 6) ☒ Claim(s) 1,3,4,8-10,12,13,18,24 and 32 is/are rejected.
- 7) ☒ Claim(s) 5, 7 & 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>8-14-2008</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Claims 1 to 23 are presented for examination. The amendment filed 6-24-2008 canceled claims 2, 6, 11, 14, 16 to 17, 19 to 23 and add new claims 24 to 33.

#### *Response to Amendment*

#### *Information Disclosure Statement*

2. The reference listed in the information disclosure statement submitted on 8-14-2008 has been considered by the examiner (see attached PTO-1449).

#### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims **1, 3, 4, 8 to 10, 12 to 13, 18 and 32** are rejected under 35 U.S.C. 102(b) as being anticipated by Ganesan et al. (USP 5666370).

Claim **1**:

**Ganesan** teaches a digital communication system with an improved error correction coding scheme implemented in channel encoders, the system comprising the steps of: dividing compress speech bits into multiple classes (class 1, 2 and 3) wherein the perceptually most significant bits (PMSB) are extracted from the class 1 bits (see fig 3 and col. 4, lines 46 to 54); which reads on “ separating the information bit sequence of

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a first coding branch into a first plurality of subsets of information bits, each subset forming a code block segment.”

Ganesan also teaches that the class 1 bits are packed as 6 message words where each message word is coded independently using Nordstrom Robinson (16, 8, 6) code (see col. 6, lines 30 to 40); which reads on “encoding the code block segments individually using at least one encoding method.” Ganesan teaches that the class 2 bits are coded separately from the class 1 bits using a punctured version of the Nordstrom Robinson code (see col. 7, lines 25 to 32).

As per claim **3**, Ganesan teaches that encoding process of the class 1 bits and the class 2 bits are arranged in parallel and that the coding of the bits are performed by two different encoders ((74 & 76). Ganesan further teaches that the extraction of the class 1 bits and the segmenting of the class 1 bits are performed different from the class 2 bits (see fig. 7 and col. 8, lines 20 to 30).

As per claim **4**, Ganesan teaches the digital communication system is a TDMA digital cellular system wherein data are processed by time slots (see col. 4, lines 18 to 34).

As per claims **8** to **10**, Ganesan teaches that the class 1 bits and the class 2 bits are arranged in parallel wherein they are coded with different encoders, and the segmenting of class 1 or class 2 bits into code blocks have the same length (see col. 7, lines 48 et seq.).

As per claims **12** and **13**, Ganesan teaches that the class 1, class 2 and class 3 bits are combined after encoding and that they are interleaved in a interleaver (78) (see col. 8, lines 28, to 30).

As per claim **18**, Ganesan teaches that a CRC calculator inserts error detection code before the class 1 bits are encoded (see col. 8, lines 24 to 30).

**Claim 32:**

Claim **32** is similar to claim 1 except for the encoder that encodes data in a code block; however this limitation is taught by Ganesan who teaches encoding using channel encoders. Therefore claim 32 is rejected for the same rationale applied to claim 1.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim **24** is rejected under 35 U.S.C. 102(e) as being anticipated by Classon et al. (USP 6769091 B2).

**Claim 24:**

**Classon** teaches an encoding method and an apparatus using squished trellis encoders, the method comprising the steps of: partitioning the speech bits into multiple

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classes (class 1a, 1b & 1c) using a multiplexing switch (220) wherein the classes (1a, 1b & 1c) blocks includes a a set number of information bits (see col. 3, lines 55 to 63).

Classson also teaches that the separated bits are encoding using different encoding methods i.e., class 1a bits are CRC encoded with encoder 250 and class 1b bits are encoded by a convolutional encoder (261) (see col. 3 line 60 to col. 4, line 16).

### ***Allowable Subject Matter***

6. Claims 5, 7 and 15 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 25 to 31 and 33 are allowed.

### ***Response to Arguments***

8. Applicant's arguments with respect to claims 1, 3, to 5, 7 to 10, 12, 13, 15 and 18 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shelly A. Chase whose telephone number is 571-272-3816. The examiner can normally be reached on Mon-Fri from 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis-Jacques can be reached on 571-272-6962. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Shelly A Chase/  
Primary Examiner, Art Unit 2112